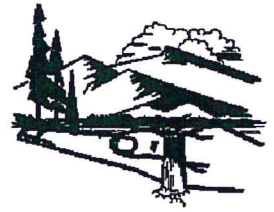




Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.



Mark Gordon, Governor

Todd Parfitt, Director

June 10, 2019

Ms. Monica Morales
Director, Air Program, EPA Region 8
1595 Wynkoop St.
Denver, CO 80202

Re: Initial Notification of PM₁₀ Exceptional Events in 2017

Dear Ms. Morales,

Attached are initial notifications of high wind blowing dust exceptional events that occurred in southwest Wyoming in 2017 that led to exceedances of the 24-hour PM₁₀ NAAQS at three (3) industrial monitors. The Wyoming Department of Environmental Quality – Air Quality Division (AQD) has evaluated the initial notifications and circumstances surrounding these events and represents that they should be evaluated by Region 8 as possible exceptional events. The exceedances covered by these initial notifications are summarized in the table below.

Date	AQS ID	Monitor Name	Owner	24-Hour PM ₁₀ Concentration (µg/m ³)
6/9/2017	56-037-0898	Downwind	Ciner Wyoming, LLC	174.9
10/7/2017	56-041-0201	Upwind	Haystack Coal Company	172.9
10/20/2017	56-037-0898	Downwind	Ciner Wyoming, LLC	272.9
11/1/2017	56-041-0201	Upwind	Haystack Coal Company	800.1
	56-041-0200	Downwind		387.9
11/1/2017	56-037-0898	Downwind	Ciner Wyoming, LLC	259.5

The AQD would like to request that the Administrator determine these possible events meet the provisions of 40 CFR 50.14 (a) (1) (F) as a regulatory determination made on a case by case basis. The AQD considers these events to be of regulatory significance because of the AQD's reliance on ambient data to determine compliance with the NAAQS at industrial facilities, the use of ambient data in AQD's permitting process, and third party interests. These reasons demonstrate the need to accurately portray anthropogenic versus non-anthropogenic or "exceptional" air quality issues to the public by means of excluding exceptional event concurred data from the data record.

In 1993 the AQD and EPA Region 8 signed a Memorandum of Agreement (MOA) to rely on ambient monitoring data at Powder River Basin coal mines to determine compliance with the 24-hour PM₁₀ NAAQS under the AQD's permitting process, rather than modeling potential 24-hour PM₁₀ impacts. In the decades since, the AQD has applied this same principal to other facilities across the state to demonstrate compliance with the 24-hour PM₁₀ NAAQS. The exceedances that the AQD is requesting Region 8 to review occurred at mining and processing facilities that have permit conditions requiring them to demonstrate compliance with the PM₁₀ NAAQS through the operation of PM₁₀ monitoring networks. The AQD reports these data to EPA Region 8 through EPA's AQS database. Because the effectiveness of the AQD's permitting and compliance programs are contingent on the lack of PM₁₀ NAAQS violations at required industrial monitoring stations, correctly reporting these data to EPA and AQS by placing exceptional event flags on these data is essential. The Region must take the appropriate steps to review and issue concurrence or non-concurrence on these data to accurately reflect the design value statistics in AQS and therefore accurately represent compliance with the NAAQS.

As mentioned above, the AQD relies on ambient industrial PM₁₀ data at facilities to determine compliance with the 24-hour NAAQS in the permitting process. It is critical that exceedances and violations of the NAAQS are properly characterized in the permit analysis as being anthropogenic or exceptional in nature. The AQD cannot issue a permit to a source that will cause or contribute to a violation of the NAAQS. For facilities that cannot model their potential permitting action, the AQD must rely on the ambient data record to prove compliance with the NAAQS. In order to rely on these monitoring data for permitting actions, exceptional events must be properly characterized in the data record and must be documented to EPA per 40 CFR 50.14. This is especially important for the three (3) Ciner Wyoming, LLC exceedances at their Downwind monitoring site covered by this initial notification because this monitor is currently at risk of violating the NAAQS for the 2016-2018 design value period.

It is also the AQD's stance that any exceedance caused by an exceptional event is significant and that it is important to demonstrate to the public the difference between exceedances that are anthropogenic versus those that are non-anthropogenic or exceptional in nature. Properly characterizing these exceedances in the public record and providing scientific evidence supporting the claim of exceptionality is essential to our shared role of serving the public. These data are used by the public, researchers, and other agencies to make scientific, public health, and policy decisions. These data must be properly flagged and concurred with in the EPA's AQS in order for those data to be handled correctly and reflect the monitor design values. Without the critical step of determining concurrence, data is often misused by these entities to support decisions.

Due to the above mentioned factors, the AQD considers these exceedances to meet the criteria of regulatory significance and requests that the Administrator make a determination under 40 CFR 50.14 (a) (1) (F) that the EPA will agree to review exceptional event demonstrations for these events.

Please contact Cara Keslar, Monitoring Section Supervisor, with questions at 307-777-8684.

Sincerely,



Darla J. Potter

Air Quality Resource Program Manager

Air Quality Division

Cc: Cara Keslar, AQD

Tyler Schiltz, Ciner Wyoming, LLC

Colton Sandall, Haystack Coal Company

EE Initial Notification Summary Information

PM₁₀ Template

Submitting Agency: State of Wyoming – Air Quality Division

Agency Contact: Cara Keslar

Date Submitted: 6/22/2018

Applicable NAAQS: 1987 PM₁₀ 24-hour precision PM monitor – 150 µg/m³ Limit

Affected Regulatory Decision¹:

(for classification decisions, specify level of the classification with/without EE concurrence)

Area Name/Designation Status: Attainment/Unclassifiable

Design Value Period (list three year period): 2015-2017

(where there are multiple relevant design value periods, summarize separately)

A) Information specific to each flagged monitor day that may be submitted to EPA in support of the affected regulatory decision listed above

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other ²)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (with units)	Notes (e.g. event name, links to other events)
June 9, 2017	High Wind	RJ	56-037-0898	Cinerr Downwind Met One BAM-1020	175µg/m ³	Exceptional Event Demonstration for the June 9, 2017 PM ₁₀ Exceedance due to High Winds, not yet submitted to EPA

B) Violating Monitors Information

(listing of all violating monitors in the planning area, regardless of operating agency, and regardless of whether or not they are impacted by EEs)

Monitor (AQS ID and POC)	Design Value (without EPA concurrence on any of the events listed in table A above)	Design Value (with EPA concurrence on all events listed in table A above)
Cinerr Downwind Met One BAM-1020 (56-037-0898-4)	1.0	0.7

¹ designation, classification, attainment determination, attainment date extension, or finding of SIP inadequacy leading to SIP call

² Provide additional information for types of event described as "other"

C) Summary of Maximum Design Value (DV) Monitor Information (Effect of EPA Concurrence on Maximum Design Value Monitor Determination)
(Two highest values from Table B)

Maximum DV monitor (AQS ID and POC) without EPA concurrence on any of the events listed in table A above	Design Value 1.0	Design Value Monitor Ciner Downwind Met One BAM-1020 (56-037-0898-4)	Comment
Maximum DV monitor (AQS ID and POC) with EPA concurrence on all events listed in table A above	Design Value 0.7	Design Value Monitor Ciner Downwind Met One BAM-1020 (56-037-0898-4)	Comment

D) List of any monitors (AQS ID and POC) within planning area with invalid design values (e.g. due to data incompleteness)

EE Initial Notification Summary Information

PM₁₀ Exceedance

Submitting Agency: State of Wyoming – Air Quality Division

Agency Contact: Cara Keslar

Date Submitted:

Applicable NAAQS: 1987 PM₁₀ 24-hr precision PM₁₀ monitoring - 150µg /m³ Limit

Affected Regulatory Decision¹: (AQD will fill this section out per 50.14, option F)

(for classification decisions, specify level of the classification with/without EE concurrence)

Area Name/Designation Status: Attainment/Unclassifiable

Design Value Period (list three year period): 2015-2017

(where there are multiple relevant design value periods, summarize separately)

A) Information specific to each flagged monitor day that may be submitted to EPA in support of the affected regulatory decision listed above

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other ²)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (with units)	Notes (e.g. event name, links to other events)
October 7, 2017	Wildfire Residue and High Winds	IT	54-041-0201-1	Haystack Upwind 1405 TEOM	172.9 µg /m ³	Haystack High Wind and Wildfire Exceptional Event Demonstration: 10/7/17, not yet submitted to EPA

B) Violating Monitors Information

(listing of all violating monitors in the planning area, regardless of operating agency, and regardless of whether or not they are impacted by EEs)

Monitor (AQS ID and POC)	Design Value (without EPA concurrence on any of the events listed in table A above)	Design Value (with EPA concurrence on all events listed in table A above)
Haystack Upwind 1405 TEOM (54-041-0201-1)	0.3	0.0

¹ designation, classification, attainment determination, attainment date extension, or finding of SIP inadequacy leading to SIP call

² Provide additional information for types of event described as "other"

C) Summary of Maximum Design Value (DV) Monitor Information (Effect of EPA Concurrence on Maximum Design Value Monitor Determination)
(Two highest values from Table B)

Maximum DV monitor (AQS ID and POC) <u>without</u> EPA concurrence on any of the events listed in table A above	Design Value 0.3	Design Value Monitor Haystack Upwind 1405 TEOM (54-041-0201-1)	Comment
Maximum DV monitor (AQS ID and POC) <u>with</u> EPA concurrence on all events listed in table A above	Design Value 0.0	Design Value Monitor Haystack Upwind 1405 TEOM (54-041-0201-1)	Comment

D) List of any monitors (AQS ID and POC) within planning area with invalid design values (e.g. due to data incompleteness)

<u>Year</u>	<u>Quarter</u>	<u>Exceedances</u>	<u>Valid Days</u>	<u>Poss Days</u>	<u>Estimated Exceedances**</u>	<u>Yearly Expected</u>	<u>w/EPA Concurrence*</u>
2015	1	0			0.00		
	2	0			0.00		
	3	0			0.00		
	4	0			0.00	0.0	
2016	1	0			0.00		
	2	0			0.00		
	3	0			0.00		
	4	0			0.00	0.0	
2017	1	0			0.00		
	2	0			0.00		
	3	0			0.00		
	4	1			1.00	1.0	
3YR TOTAL						0.3	0.0

* Since all exceedances are associated with Exceptional Event Demonstrations, the DV with EPA concurrence would be zero

** if the first exceedance is observed in a calendar quarter in which the monitor is already sampling every day, no adjustment for missing data will be made to the first exceedance if a 75 percent data capture rate was achieved in the quarter in which it was observed. (note: 1st exceedance is interpreted as 1st in calendar year)

EE Initial Notification Summary Information

PM₁₀ Template

Submitting Agency: State of Wyoming – Air Quality Division

Agency Contact: Cara Keslar

Date Submitted: 7/11/2018

Applicable NAAQS: 1987 PM₁₀ 24-hour precision PM monitor – 150 µg/m³ Limit

Affected Regulatory Decision¹:

(for classification decisions, specify level of the classification with/without EE concurrence)

Area Name/Designation Status: Attainment/Unclassifiable

Design Value Period (list three year period): 2015-2017

(where there are multiple relevant design value periods, summarize separately)

A) Information specific to each flagged monitor day that may be submitted to EPA in support of the affected regulatory decision listed above

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other ²)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (with units)	Notes (e.g. event name, links to other events)
June 9, 2017	High Wind	RJ	56-037-0898	Ciner Downwind Met One BAM-1020	175µg/m ³	Exceptional Event Demonstration for the June 9, 2017 PM ₁₀ Exceedance due to High Winds, not yet submitted to EPA
October 20, 2017	High Wind	RJ	56-037-0898	Ciner Downwind Met One BAM-1020	272.9µg/m ³	Exceptional Event Demonstration for the October 20, 2017 PM ₁₀ Exceedance due to High Winds, not yet submitted to EPA

B) Violating Monitors Information

(listing of all violating monitors in the planning area, regardless of operating agency, and regardless of whether or not they are impacted by EEs)

Monitor (AQS ID and POC)	Design Value (without EPA concurrence on any of the events listed in table A above)	Design Value (with EPA concurrence on all events listed in table A above)
Ciner Downwind Met One BAM-1020 (56-037-0898-4)	1.0	0.3

¹ designation, classification, attainment determination, attainment date extension, or finding of SIP inadequacy leading to SIP call

² Provide additional information for types of event described as "other"

C) Summary of Maximum Design Value (DV) Monitor Information (Effect of EPA Concurrence on Maximum Design Value Monitor Determination)
(Two highest values from Table B)

Maximum DV monitor (AQS ID and POC) <u>without</u> EPA concurrence on any of the events listed in table A above	Design Value 1.0	Design Value Monitor Ciner Downwind Met One BAM-1020 (56-037-0898-4)	Comment
Maximum DV monitor (AQS ID and POC) <u>with</u> EPA concurrence on all events listed in table A above	Design Value 0.3	Design Value Monitor Ciner Downwind Met One BAM-1020 (56-037-0898-4)	Comment

D) List of any monitors (AQS ID and POC) within planning area with invalid design values (e.g. due to data incompleteness)

EE Initial Notification Summary Information

PM₁₀ Exceedance

Submitting Agency: State of Wyoming – Air Quality Division

Agency Contact: Cara Keslar

Date Submitted:

Applicable NAAQS: 1987 PM₁₀ 24-hr precision PM₁₀ monitoring - 150µg /m³ Limit

Affected Regulatory Decision¹: (AOD will fill this section out per 50.14, option F)

(for classification decisions, specify level of the classification with/without EE concurrence)

Area Name/Designation Status: Attainment/Unclassifiable

Design Value Period (list three year period): 2015-2017

(where there are multiple relevant design value periods, summarize separately)

A) Information specific to each flagged monitor day that may be submitted to EPA in support of the affected regulatory decision listed above

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other ²)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (with units)	Notes (e.g. event name, links to other events)
October 7, 2017	Wildfire Residue and High Winds	IT	54-041-0201-1	Haystack Upwind 1405 TEOM	172.9 µg /m ³	Haystack High Wind and Wildfire Exceptional Event Demonstration: 10/7/17, not yet submitted to EPA
November 1, 2017	Wildfire Residue and High Winds	IT	54-041-0201-1	Haystack Upwind 1405 TEOM	800.1 µg /m ³	Haystack High Wind and Wildfire Exceptional Event Demonstration: 11/1/17, not yet submitted to EPA

B) Violating Monitors Information

(listing of all violating monitors in the planning area, regardless of operating agency, and regardless of whether or not they are impacted by EEs)

Monitor (AQS ID and POC)	Design Value (without EPA concurrence on any of the events listed in table A above)	Design Value (with EPA concurrence on all events listed in table A above)
Haystack Upwind 1405 TEOM (54-041-0201-1)	0.7	0.0

¹ designation, classification, attainment determination, attainment date extension, or finding of SIP inadequacy leading to SIP call

² Provide additional information for types of event described as "other"

C) Summary of Maximum Design Value (DV) Monitor Information (Effect of EPA Concurrence on Maximum Design Value Monitor Determination)
(Two highest values from Table B)

Maximum DV monitor (AQS ID and POC) <u>without</u> EPA concurrence on any of the events listed in table A above	Design Value 0.7	Design Value Monitor Haystack Upwind 1405 TEOM (54-041-0201-1)	Comment
Maximum DV monitor (AQS ID and POC) <u>with</u> EPA concurrence on all events listed in table A above	Design Value 0.0	Design Value Monitor Haystack Upwind 1405 TEOM (54-041-0201-1)	Comment

D) List of any monitors (AQS ID and POC) within planning area with invalid design values (e.g. due to data incompleteness)

<u>Year</u>	<u>Quarter</u>	<u>Exceedances</u>	<u>Valid Days</u>	<u>Poss Days</u>	<u>Estimated Exceedances**</u>	<u>Yearly Expected</u>	<u>w/EPA Concurrence*</u>
2015	1	0			0.00		
	2	0			0.00		
	3	0			0.00		
	4	0			0.00	0.0	
2016	1	0			0.00		
	2	0			0.00		
	3	0			0.00		
	4	0			0.00	0.0	
2017	1	0			0.00		
	2	0			0.00		
	3	0			0.00		
	4	2	36	36	2.00	2.0	
3YR TOTAL						0.7	0.0

* Since all exceedances are associated with Exceptional Event Demonstrations, the DV with EPA concurrence would be zero

** if the first exceedance is observed in a calendar quarter in which the monitor is already sampling every day, no adjustment for missing data will be made to the first exceedance if a 75 percent data capture rate was achieved in the quarter in which it was observed. (note: 1st exceedance is interpreted as 1st in calendar year)

EE Initial Notification Summary Information

PM₁₀ Exceedance

Submitting Agency: State of Wyoming – Air Quality Division

Agency Contact: Cara Keslar

Date Submitted:

Applicable NAAQS: 1987 PM₁₀ 24-hr precision PM₁₀ monitoring - 150µg /m³ Limit

Affected Regulatory Decision¹: (AQD will fill this section out per 50.14, option F)

(for classification decisions, specify level of the classification with/without EE concurrence)

Area Name/Designation Status: Attainment/Unclassifiable

Design Value Period (list three year period): 2015-2017

(where there are multiple relevant design value periods, summarize separately)

A) Information specific to each flagged monitor day that may be submitted to EPA in support of the affected regulatory decision listed above

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other ²)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (with units)	Notes (e.g. event name, links to other events)
November 1, 2017	Wildfire Residue and High Winds	IT	54-041-0200-1	Haystack Downwind 1405 TEOM	387.9 µg /m ³	Haystack High Wind and Wildfire Exceptional Event Demonstration: 11/1/17, not yet submitted to EPA

B) Violating Monitors Information

(listing of all violating monitors in the planning area, regardless of operating agency, and regardless of whether or not they are impacted by EEs)

Monitor (AQS ID and POC)	Design Value (without EPA concurrence on any of the events listed in table A above)	Design Value (with EPA concurrence on all events listed in table A above)
Haystack Downwind 1405 TEOM (54-041-0200-1)	0.3	0.0

¹ designation, classification, attainment determination, attainment date extension, or finding of SLP inadequacy leading to SLP call

² Provide additional information for types of event described as "other"

C) Summary of Maximum Design Value (DV) Monitor Information (Effect of EPA Concurrence on Maximum Design Value Monitor Determination)
(Two highest values from Table B)

Maximum DV monitor (AQS ID and POC) <u>without</u> EPA concurrence on any of the events listed in table A above	Design Value 0.3	Design Value Monitor Haystack Downwind 1405 TEOM (54-041-0200-1)	Comment
Maximum DV monitor (AQS ID and POC) <u>with</u> EPA concurrence on all events listed in table A above	Design Value 0.0	Design Value Monitor Haystack Downwind 1405 TEOM (54-041-0200-1)	Comment

D) List of any monitors (AQS ID and POC) within planning area with invalid design values (e.g. due to data incompleteness)

<u>Year</u>	<u>Quarter</u>	<u>Exceedances</u>	<u>Valid Days</u>	<u>Poss Days</u>	<u>Estimated Exceedances**</u>	<u>Yearly Expected</u>	<u>w/EPA Concurrence*</u>
2015	1	0			0.00		
	2	0			0.00		
	3	0			0.00		
	4	0			0.00	0.0	
2016	1	0			0.00		
	2	0			0.00		
	3	0			0.00		
	4	0			0.00	0.0	
2017	1	0			0.00		
	2	0			0.00		
	3	0			0.00		
	4	1			1.00	1.0	
3YR TOTAL						0.3	0.0

* Since all exceedances are associated with Exceptional Event Demonstrations, the DV with EPA concurrence would be zero

** if the first exceedance is observed in a calendar quarter in which the monitor is already sampling every day, no adjustment for missing data will be made to the first exceedance if a 75 percent data capture rate was achieved in the quarter in which it was observed. (note: 1st exceedance is interpreted as 1st in calendar year)

EE Initial Notification Summary Information

PM₁₀ Template

Submitting Agency: State of Wyoming – Air Quality Division

Agency Contact: Cara Keslar

Date Submitted: 7/11/2018

Applicable NAAQS: 1987 PM₁₀ 24-hour precision PM monitor – 150 µg/m³ Limit

Affected Regulatory Decision¹:

(for classification decisions, specify level of the classification with/without EE concurrence)

Area Name/Designation Status: Attainment/Unclassifiable

Design Value Period (list three year period): 2015-2017

(where there are multiple relevant design value periods, summarize separately)

A) Information specific to each flagged monitor day that may be submitted to EPA in support of the affected regulatory decision listed above

Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other ²)	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (with units)	Notes (e.g. event name, links to other events)
June 9, 2017	High Wind	RJ	56-037-0898	Ciner Downwind Met One BAM-1020	175µg/m ³	Exceptional Event Demonstration for the June 9, 2017 PM ₁₀ Exceedance due to High Winds, not yet submitted to EPA
October 20, 2017	High Wind	RJ	56-037-0898	Ciner Downwind Met One BAM-1020	272.9µg/m ³	Exceptional Event Demonstration for the October 20, 2017 PM ₁₀ Exceedance due to High Winds, not yet submitted to EPA
November 1, 2017	High Wind	RJ	56-037-0898	Ciner Downwind Met One BAM-1020	259.5µg/m ³	Exceptional Event Demonstration for the November 1, 2017 PM ₁₀ Exceedance due to High Winds, not yet submitted to EPA

B) Violating Monitors Information

(listing of all violating monitors in the planning area, regardless of operating agency, and regardless of whether or not they are impacted by EEs)

Monitor (AQS ID and POC)	Design Value (without EPA concurrence on any of the events listed in table A above)	Design Value (with EPA concurrence on all events listed in table A above)
Ciner Downwind Met One BAM-1020 (56-037-0898-4)	1.0	0

¹ designation, classification, attainment determination, attainment date extension, or finding of SIP inadequacy leading to SIP call

² Provide additional information for types of event described as "other"

C) Summary of Maximum Design Value (DV) Monitor Information (Effect of EPA Concurrence on Maximum Design Value Monitor Determination)
(Two highest values from Table B)

Maximum DV monitor (AQS ID and POC) <u>without</u> EPA concurrence on any of the events listed in table A above	Design Value	Design Value Monitor	Comment
Maximum DV monitor (AQS ID and POC) <u>with</u> EPA concurrence on all events listed in table A above	Design Value 0	Ciner Downwind Met One BAM-1020 (56-037-0898-4) Design Value Monitor Ciner Downwind Met One BAM-1020 (56-037-0898-4)	Comment

D) List of any monitors (AQS ID and POC) within planning area with invalid design values (e.g. due to data incompleteness)